

the document entitled "MPEG-4 IPR PROTECTION REQUIREMENT SPECIFICATIONS" BY Hill, et al. Since the Examiner did not strike through that reference, it is assumed that the cited reference has been considered unless the Examiner indicates otherwise. However, Applicant submits that the record would be more clear if the Examiner would also initial in the left-hand column of the PTO-1449 form next to that reference and send another copy of the PTO-1449 form to Applicant with the next official communication. Such action is respectfully requested.

Applicant requests favorable reconsideration and allowance of this application in view of the foregoing amendments and the following remarks.

A new title has been presented, as requested by the Examiner.

Claims 1 through 22 are pending in this application, with Claims 1, 4, 6, 9, 11, 14, 16, 19, 21, and 22 being independent.

Claims 1-5, 9, 11-15, 19, and 22 have been amended. Applicant submits that support for these amendments can be found in the original disclosure, and therefore no new matter has been added.

Claims 1 through 22 were rejected under 35 U.S.C. § 103(a) as being unpatentable over European Patent No. 0715246 A1 (Stefik, et al.). Applicant respectfully traverses this rejection for the reasons discussed below.

Regarding independent Claims 1, 4, 9, 11, 14, 19, and 22, the present invention as recited in those claims includes, *inter alia*, the features of identifying objects in an image that have copyright-protected information and controlling a display to inhibit the display of an object identified as having copyright-protected information and to allow the display of objects that are

not identified as having copyright-protected information. Applicant submits that the cited art fails to disclose or suggest at least these features.

Stefik, et al. discloses a system for distributing a digital work through a network. *See* Fig. 1; page 2, lines 35-39. More specifically, that document discloses to construct a tree structure of digital works, which are nodes of the tree structure (*see* abstract and page 5, lines 24-25 & 35-41) and also discloses to set a usage right at each node (*see* Fig. 7). However, that document neither discloses nor suggests at least the above-mentioned features of the claimed invention. In the system of Stefik, et al., when a user who accesses the system is authenticated, that user is allowed to use a digital work on the basis of a usage right. That is, the system only controls usage of a digital work in accordance with a usage right provided to each digital work but is silent regarding usage of a digital work for which no usage right is provided. Thus, the does not disclose control of a display of a digital work in a different manner in accordance with whether or not the digital work has an associated usage right.

For the foregoing reasons, Applicant submits that the present invention as recited in independent Claims 1, 4, 9, 11, 14, 19, and 22 is patentable over the cited art.

Independent Claims 6, 16, and 21 recite, among others, the feature of controlling rendering of a scene on the basis of wheter data is copyright-protected scene data or copyright-unprotected scene data. Applicant submits that those claims also distinguish over the cited art.

The dependent claims recited additional features that further define the invention. They are patentable for the same reasons as the independent claims and further due to the additional features they recite.

In view of the foregoing, this application is believed to be in condition for allowance. Favorable reconsideration, withdrawal of the rejection, and an early Notice of Allowance are requested.

Applicant's undersigned attorney may be reached in our Washington, D.C. office by telephone at (202) 721-5427. All correspondence should continue to be directed to our below-listed address.

Respectfully submitted,



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VERSION WITH MARKINGS SHOWING CHANGES MADE TO THE TITLE

The title has been amended as follows.

--IMAGE PROCESSING APPARATUS, METHOD, AND STORAGE MEDIUM FOR  
CONTROLLING DISPLAY OF COPYRIGHT-PROTECTED INFORMATION--

VERSION WITH MARKINGS SHOWING CHANGES MADE TO THE SPECIFICATION

The paragraph at page 1, lines 5-7 has been amended as follows.

--The invention relates to an image processing apparatus, method, and system and a storage medium, in which a copyright can be protected.--

The paragraph at page 1, lines 9-16 has been amended as follows.

--Hitherto, a VRML (Virtual Reality Markup Language) is widely and generally used as a language to describe a 3D (three dimension) scene. In a system using such a language, an arbitrary object is arranged in a 3D space, a sight point, a light source, a texture map, and the like are set to thereby construct a scene, and a virtual space with high [reality] realism can be formed by adding data such as video/audio data to each object.--

The paragraph at page 1, lines 17-23 has been amended as follows.

--In ISO/IEC 14494-1 (MPEG-4 Systems), on the basis of the foregoing VRML, data to describe the scene is reduced and a 3D scene similar to that mentioned above is described by

using a BIFS (Binary Format for Scene Description) obtained by using a binary expression -  
table [converting] to convert the VRML[,.]. The binarized BIFS data is called a BIFS stream.--

The paragraph at page 6, lines 2-4 has been amended as follows.

--In such a case, however, the 3D object box itself is not displayed [neither] in a manner  
similar to the 3D object cylinder at this time.--

The paragraph at page 6, lines 5-12 has been amended as follows.

--[It is, therefore] Therefore, one approach considered is to previously divide the BIFS  
stream into every 3D object and protect only the stream which defines the 3D object cylinder.  
However, it is not easy to divide the BIFS stream and each time the 3D object is moved,  
modified, extinguished, or newly appears, the BIFS stream corresponding thereto has to be  
updated [any time] or the like, so that a problem arises such that processes become complicated  
[occurs].--

The paragraph at page 6, lines 13-18 has been amended as follows.

--In the case of using the VRML, it is also a considered approach to form a VRML file  
corresponding to each 3D object and describe the whole 3D scene so as to individually recognize

each of a plurality of 3D objects. In this case, however, a problem arises such that the VRML file has to be complicatedly formed [occurs].--

The paragraph at page 6, lines 21-27 has been amended as follows.

--In consideration of the above problems, it is an object of the invention to provide an image processing apparatus, method, and system and a storage medium, in which a copyright with respect to an arbitrary 3D object can be extremely simply and easily protected without performing a troublesome process such that a stream of BIFS is divided into a plurality of streams.--

The paragraph at page 7, lines 1-15 has been amended as follows.

--To accomplish the above object, according to a preferred embodiment of the invention, there is disclosed an image processing apparatus for displaying a three-dimensional scene, comprising identifying means for identifying a 3-dimensional object having copyright-protected information among 3-dimensional objects constructing the 3-dimensional scene, on the basis of data describing the 3-dimensional scene; and display inhibiting means for inhibiting a display of the 3-dimensional object identified by the identifying means until a predetermined authenticating process is finished. There are also disclosed an information processing method for such an

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information processing apparatus and a storage medium which stores a program to realize such an information processing method.--

VERSION WITH MARKINGS TO SHOW CHANGES MADE TO CLAIMS

1. (Amended) An image processing apparatus for displaying a [3-dimensional] scene, comprising:

(A) identifying means for identifying an [a 3-dimensional] object having copyright-protected information among [3-dimensional] objects constructing the [said 3-dimensional] scene on the basis of data describing [said 3-dimensional] the scene; and

(B) display [inhibiting] control means for inhibiting, on the basis of an identification result of said identifying means, a display of the [3-dimensional] object identified by said identifying means until a predetermined authenticating process is finished and allowing a display of objects that are not identified as having copyright-protected information.

2. (Amended) An apparatus according to claim 1, further comprising reproduction inhibiting means for inhibiting a reproduction of video/audio in the case where [said 3-dimensional] the object whose display is inhibited by said display [inhibiting] control means is accompanied with [the] video/audio data.

3. (Amended) An apparatus according to claim 2, further comprising synchronizing means for, in the case where [said 3-dimensional] the object whose display is inhibited by said display [inhibiting] control means is accompanied with the video/audio data, synchronizing the

display of [said 3-dimensional] the object with the reproduction of said video/audio when the inhibition of the display by said display [inhibiting] control means is cancelled.

4. (Amended) An image processing apparatus for displaying a [3-dimensional] scene, comprising:

- (A) identifying means for identifying [a 3-dimensional] an object having copyright-protected information among [3-dimensional] objects constructing [said 3-dimensional] the scene on the basis of data describing [said 3-dimensional] the scene; and
- (B) classifying means for classifying the [3-dimensional] object identified by said identifying means in [to] a first group and classifying the other [3-dimensional] objects in [to] a second group; and
- (C) display control means for controlling the display of [said 3-dimensional] the scene on the basis of the groups classified by said classifying means to inhibit display of the object having copyright-protected information that has not been authenticated and to allow display of objects not having copyright-protected information.

5. (Amended) An apparatus according to claim 4, wherein said classifying means further classifies the [3-dimensional] object identified by said identifying means and video/audio data associated with [said 3-dimensional] the object in [to] the first group and classifies the other [3-dimensional] objects and video/audio data associated with [said] the other [3-dimensional] objects in [to] the second group.

9. (Amended) An image processing apparatus comprising:

detecting means for detecting a copyright protection node from a language describing a 3-dimensional scene;

identifying means for identifying a 3-dimensional object designated by the copyright protection mode detected by said detecting means; and

display [inhibiting] control means for inhibiting a display of the 3-dimensional object identified by said identifying means until a predetermined authenticating process is finished and allowing display of a 3-dimensional that is not identified as having copyright-protected information.

11. (Amended) An image processing method of displaying a [3-dimensional] scene, comprising:

(A) an identifying step of identifying [a 3-dimensional] an object having copyright-protected information among [3-dimensional] objects constructing [said 3-dimensional] the scene on the basis of data describing [said 3-dimensional] the scene; and

(B) a display [inhibiting] control step of inhibiting, on the basis of an identification result in said identifying step, a display of the [3-dimensional] object identified in said identifying step until a predetermined authenticating process is finished and allowing display of objects that are not identified as having copyright-protected information.

12. (Amended) A method according to claim 11, further comprising a reproduction inhibiting step of inhibiting a reproduction of video/audio in the case where [said 3-dimensional] the object whose display is inhibited in said display [inhibiting] control step is accompanied with [the] video/audio data.

13. (Amended) A method according to claim 12, further comprising a synchronizing step of, in the case where [said 3-dimensional] the object whose display is inhibited in said display [inhibiting] control step is accompanied with the video/audio data, synchronizing the display of [said 3-dimensional] the object with the reproduction of [said] the video/audio when the inhibition of the display in said display [inhibiting] control step is cancelled.

14. (Amended) An image processing method of displaying a [3-dimensional] scene, comprising:

(A) an identifying step of identifying [a 3-dimensional] an object having copyright-protected information among [3-dimensional] objects constructing [said 3-dimensional] the scene on the basis of data describing [said 3-dimensional] the scene; and

(B) a classifying step of classifying the [3-dimensional] object identified in said identifying step in [to] a first group and classifying the other [3-dimensional] objects in [to] a second group; and

(C) a display control step of controlling the display of [said 3-dimensional] the scene on the basis of the groups classified in said classifying step to inhibit display of the object having

copyright-protected information that has not been authenticated and to allow display of objects not having copyright-protected information.

15. (Amended) A method according to claim 14, wherein in said classifying step, the [3-dimensional] object identified in said identifying step and video/audio data associated with [said 3-dimensional] the object are classified in [to] the first group, and the other [3-dimensional] objects and video/audio data associated with [said] the other [3-dimensional] objects are classified in [to] the second group.

19. (Amended) An image processing method comprising:

(A) a detecting step of detecting a copyright protection node from a language describing a 3-dimensional scene;

(B) an identifying step of identifying a 3-dimensional object designated by the copyright protection node detected in said detecting step; and

(C) a display [inhibiting] control step of inhibiting a display of the 3-dimensional object identified in said identifying step until a predetermined authenticating process is finished and allowing display of 3-dimensional objects that are not identified as having copyright-protected information.

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22. (Amended) A storage medium which stores a computer program, said computer program comprising:

(A) an identifying module for identifying [a 3-dimensional] an object having copyright-protected information among [3-dimensional] objects constructing a [3-dimensional] scene on the basis of data describing [said 3-dimensional] the scene; and

(B) a display [inhibiting] control module for inhibiting, on the basis of an identification result of said identifying module, a display of the [3-dimensional] object identified by the identifying process by said identifying module until a predetermined authenticating process is finished and allowing display of objects that are not identified as having copyright-protected information.